

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

August 10, 2012

Via E-mail
Simon Lowth
Interim Chief Executive Officer
AstraZeneca PLC
2 Kingdom Street
London W2 6BD

Re: AstraZeneca PLC

Annual Report on Form 20-F for the Fiscal Year Ended December 31, 2011

Filed March 28, 2012 File No. 001-11960

Dear Mr. Lowth:

We have reviewed your response dated July 16, 2012 and have the following additional comment. Please respond to this letter within 10 business days by either amending your annual report as requested or, if you still do not believe our comment applies to your facts and circumstances, filing a response that further explains your position.

After reviewing the information you provide, we may have additional comments.

Item 4. Information on the Company

B. Business Overview, page 2

1. We note your response to our prior comment 1. Although we recognize that you are directly responsible for the steps required to bring Crestor to market, your ability to do so is entirely reliant on the license agreement you have with Shionogi & Co., Limited and the exclusive use of the rosuvastatin calcium compound obtained through this agreement. As Crestor was responsible for approximately 18.6% of your total revenues in 2011, and this percentage is likely to increase due to increased generic competition faced by your other products, we continue to believe that you are substantially dependent on the Shionogi agreement. Accordingly, we request that you amend your 20-F to file this agreement.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose

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the Commission from taking any action with respect to the filing; and

• the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Scot Foley, Staff Attorney, at (202) 551-3383, or me at (202) 551-3715, with any questions.

Sincerely,

/s/ Jeffrey Riedler

Jeffrey Riedler Assistant Director